

ABSTRACT OF THE DISCLOSURE

A semiconductor device has multiple through electrodes with the same cross-sectional area extending through a semiconductor chip linking its front to back surface. The number of electrodes used is determined in accordance with the magnitude of the electric current for the same signal. Hence, a semiconductor device and a chip-stack semiconductor device are provided which are readily capable of preventing the electrodes' resistance from developing excessive voltage drop, heat, delay, and loss, and also from varying from one electrode to the other.